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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/479,795	01/10/2000	DAVID J. LUNDIN	53714USA6B	3553

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EXAMINER

TSO, LAURA K

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 12/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/479,795

Applicant(s)

Lundin

Examiner

Tso

Art Unit

1234



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-10, and 13-17 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 11, and 12 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Apr 26, 2001 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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## **DETAILED ACTION**

### ***Specification***

1. The disclosure should be carefully reviewed to ensure that any and all grammatical, idiomatic, and spelling or other minor errors are corrected.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by EPA 590,511.

The EPA above discloses a light guide including a light guide core [36], a plurality of equally spaced light extraction structures [48] and a diffuse reflection material [bottom surface is described as mirrored: figure 1].

### ***Claim Rejections - 35 USC § 103***

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-10 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPA 590,511.

Prior art does not disclose the light extraction structures are unequally spaced along the length of the device. However, it is clear from the prior art device that placing light extraction structures in an area causes that area to be illuminated. Thus, it would have been obvious to one of ordinary skill in the art to place the extraction structures where illumination is needed and to not place the structures where illumination is not desired thus creating an uneven placement of the structures.

The prior art does not disclose the claimed materials used to make the core of reflection material. However, it would be obvious to one having ordinary skill in the art at the time the invention was made to use any known material to create the core including a polymerizable material such as acrylate or urethane because these materials are all known light conductors. Also, it would be obvious to one having ordinary skill in the art at the time the invention was made to use any known material to create the reflective sheet including a polymeric material, a micro voided material, a micro porous material, such as polytetrafluoroethylene, or a material

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formed by thermally induced phase separation because these materials are all known light reflectors. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

***Allowable Subject Matter***

6. Claims 2, 3, 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to show or suggest an illumination device comprising a light guide core having at least one extraction structures and a diffuse reflective material as claimed in claim 1 and further including the light guide being a fiber.

Prior art fails to show or suggest an illumination device comprising a light guide core having at least one extraction structures and a diffuse reflective material as claimed in claim 1 and further including cladding material surrounding the light guide.

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***Conclusion***

8. Any inquiry concerning this communication should be directed to the Examiner at the below-listed number on **Mondays and Wednesdays until 2:00pm and Fridays with various hours. Personal interviews may be accommodated anytime on a limited basis.**

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Sandra O'Shea, can be reached on 703 305 4939. The fax numbers for this Technology Center 2800 are 703 305 3432 and 703 308 7722.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is 703 308 0956, Monday-Friday, 830am to 5:00pm, EST.

By: *Laura TSO*  
LAURA TSO  
Primary Examiner  
703 305 1672